

March 11, 1953

Dear Bruce:

I have been wanting to write you for some time, but was inhibited by the arrival of a package of cultures, as I have been expecting a letter from you to follow. However, this has not arrived and I thought it best to let you know.

Going over your letters, I note occasional requests for cultures— have I filled them all? It would help me considerably if you could summarize and list anything you can use. Esther and I had a very profitable visit with Edwards, and I am still trying to digest some of the material I brought back. Here are some odd notes, cultures, etc:

- 1) IX XII 1,2:1,5 from Edwards 157 —x miami SW 973
- 2) A few more nonmotile typhimuriums, paraB's and groupD's. Am doing homology tests, and will report and send as ready. Have you tested homologies of SW553 or are you confining yourself to TM? One of these has given a track fully 21 mm long (in projection) actually longer) and still going. So far it has been single, but it may have just branched.
- 3) SW553 was part of an epidemic: have gotten some other cultures, (came from Guatemala, calves and pigs) and am seeking more details. Four available cultures seem so far identical in cross-mot. tests.
- 4) Peculiar results with abortus-equi, Edwards #26. No effects whatever —x 26, but 26—x SW-666 gave several IV V XII a:—. This may have do do with Edwards' and Bruner's finding that an a phase can be gotten from ab-equi with great difficulty, and ~~xxxx~~ would resemble previous findings that TM phase 2 —x SW666 does give i:— as frequently as phase 1. Suggests that SW666 residual genotype does permit activity or activation of otherwise inactive loci. On the other hand 26—x LT-2 gave an enx:— which seems stubbornly monophasic.
- 5) Other misc. S. zega —x 666 : d:—; S. javiana —x 666: lz₂₈. An inaggl. that arose in a —x abony exp't proves to be z₃₃:enx. z₃₃ is probably a mutant allele of b. (As is the 1,2 of #157).
- 6) A nonmotile regarded by Kauffmann as aberrant gallinarum was not transmotilizable by var. Fla⁺ FA, but —x 666 gave (gm)+. Am testing —x various NM to see whether it turns up as demonstrable double. Extensive tests —x pulkorum and gallinarum, various strains, gave no motility, not did I get Mal+ from pullorum. (Am planning to try pullorum Mal+ variant —x pullorum). Also pullorum, gall,—x 666 gave no motility of Gal+. I suspect rather more than host adaptation.
- 7) Edwards fully sympathetic to JT's serological work being presented. He has done ~~xxx~~ quite a number of other transductions, mostly diphasics, and will not have duplicated work you already mentioned on —x666. He is in fairly close touch directly with JT.
- 8) How is paper? 9) What are these last strains. 10) A spec. lambda stock turned up, transductions: plaques more than 1:1000. Isolated transductions appear to segregate regularly. 11) Some peculiar stuff on formalin-labile H antigens in cholerae-suis. Not too relevant. Cf. Spicer.

My apologies for so many fragments. Will communicate more fully after I have some time, and have heard from you.